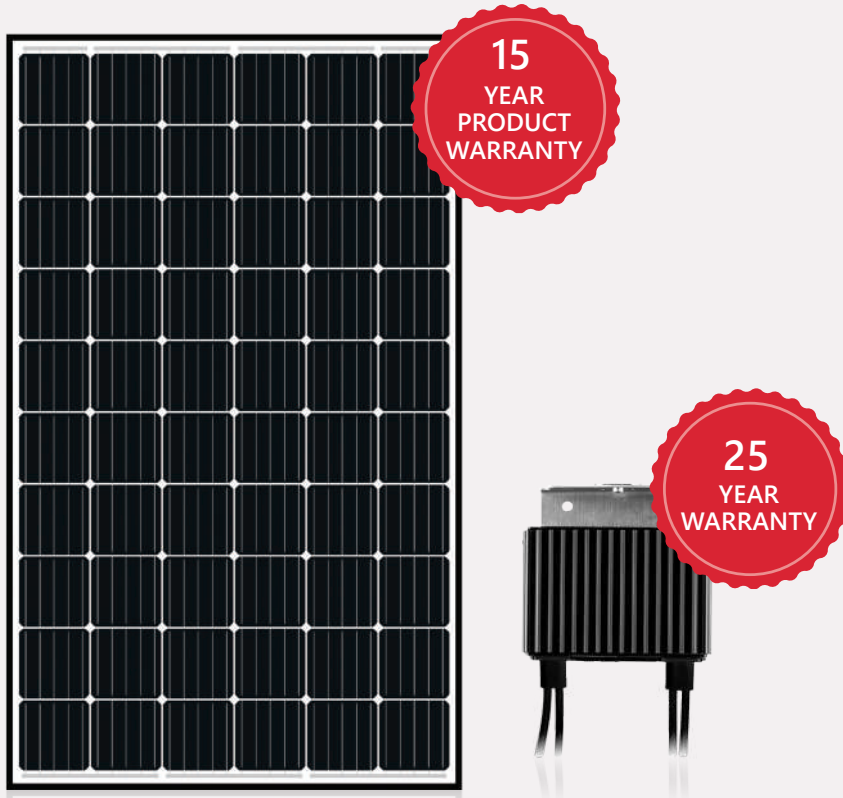


# Smart Panel

60-Cell Monocrystalline PERC Panel with  
Integrated Power Optimiser  
For Australia

PV300-60MMJ / PV310-60MMJ



SMART PANEL

## PV to grid solution including full service from SolarEdge

- Easy installation with panel pre-assembled optimiser
- Optimised energy output by constantly tracking the maximum power point (MPPT) of each panel individually
- Panel-level voltage shutdown for installer and firefighter safety
- Full visibility of system's performance from panels to grid
- Superior quality control with full automatic production line and 100% EL triple inspection
- Excellent mechanical loading and shock resistance performance
- Elegant design with black frame
- 15-year panel warranty and 25-year performance warranty
- Specifically designed to work with SolarEdge inverters

# Smart Panel 60-Cell Monocrystalline PERC Panel with Integrated Power Optimiser For Australia

PV300-60MMJ / PV310-60MMJ

## PANEL ELECTRICAL PROPERTIES

	PV300-60MMJ	PV310-60MMJ	
<b>STC<sup>(1)</sup></b>			
Panel Power	300	310	W
Max. Power Voltage (Vmp)	32.62	33.16	V
Max. Power Current (Imp)	9.2	9.35	A
Open Circuit Voltage (Voc)	39.75	40.09	V
Short Circuit Current (Isc)	9.64	9.76	A
Maximum System Voltage	1000		Vdc
Maximum Series Fuse Rating	15		A
Panel Efficiency	18.3	18.9	%
Power Tolerance	0 ~ +5		W
<b>NOCT<sup>(2)</sup></b>			
Panel Power	223.3	230.7	W
Max. Power Voltage (Vmp)	30.34	30.84	V
Max. Power Current (Imp)	7.36	7.48	A
Open Circuit Voltage (Voc)	37.28	37.60	V
Short Circuit Current (Isc)	7.78	7.87	A

## PANEL MECHANICAL PROPERTIES

Cells	60 (6 x 10)	
Cell Type	Monocrystalline PERC	
Cell Dimensions	156 x 156	mm
Dimensions (L x W x H)	1650 x 992 x 40	mm
Front Design Load (snow)	3600	Pa
Front Test Load <sup>(3)</sup>	5400	Pa
Rear Design Load (wind)	2400	Pa
Rear Test Load <sup>(3)</sup>	3600	Pa
Weight (with Power Optimiser)	18.8	kg
Front Glass	3.2mm, coated toughened glass	
Frame	Black anodized aluminium	
Junction Box	IP67	
Connector Type	MC4 (PVKST4II-UR, PV-KBT4II-UR)	
Operating Temperature	-40 to +85	°C
Packaging Information (units per pallet)	26	

## CERTIFICATIONS & WARRANTY

Panel Certifications	IEC 61215:2016, IEC61730:2016, CEC listing AU, PID: IEC62804, SIL, AS4040.2:1992 (wind pressure)
Product Warranty	Power Optimiser — 25-year warranty, Panel — 15-year warranty
Output Warranty of Pmax	25-year linear Panel warranty <sup>(4)</sup>

## TEMPERATURE CHARACTERISTICS

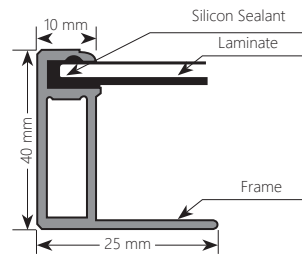
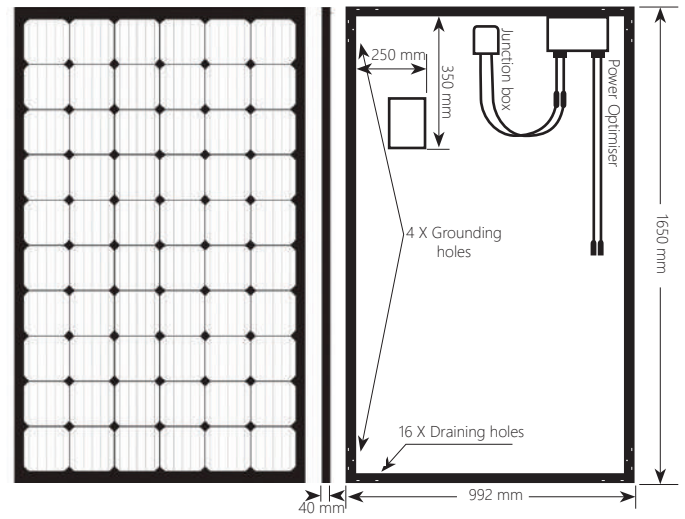
Temperature Coefficient Power (Pm)	-0.40	% / °C
Temperature Coefficient Voltage (Voc)	-0.29	% / °C
Temperature Coefficient Current (Isc)	0.04	% / °C
Operating Cell Temperature (NOCT)	45 ± 2	°C

<sup>(1)</sup> STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5.

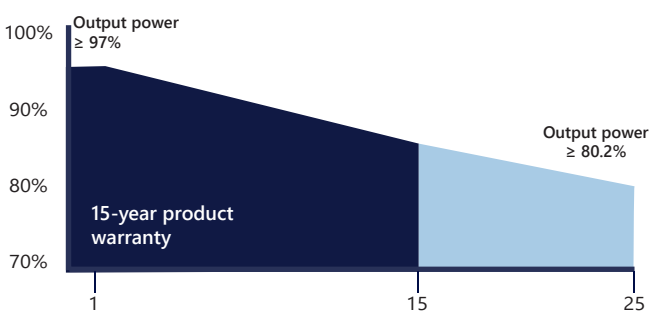
<sup>(2)</sup> NOCT: Irradiance at 800 W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1 m/s.

<sup>(3)</sup> Safety factor of 1.5

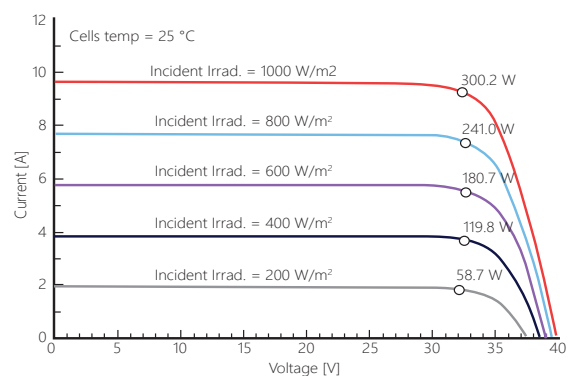
<sup>(4)</sup> 1<sup>st</sup> year: 97%, 80.2% power output over 25 years



### Linear Warranty 15-Year Product Warranty + 25-Year Linear Power Warranty



### Panel I-V Curve (PV300-60MMJ)



# Smart Panel 60-Cell Monocrystalline PERC Panel with Integrated Power Optimiser For Australia

## PV300-60MMJ / PV310-60MMJ

### POWER OPTIMISER PROPERTIES

#### INPUT

Rated Input DC Power	370	W
Absolute Maximum Input Voltage (Voc at lowest temperature)	60	
MPPT Operating Range	8 - 60	Vdc
Maximum Short Circuit Current (Isc)	11	Adc
Maximum Efficiency	99.5	%
Weighted Efficiency	98.8	%
Overvoltage Category	II	

#### OUTPUT DURING OPERATION (POWER OPTIMISER CONNECTED TO OPERATING SOLAREEDGE INVERTER)

Maximum Output Current	15	Adc
Maximum Output Voltage	60	Vdc

#### OUTPUT DURING STANDBY (POWER OPTIMISER DISCONNECTED FROM SOLAREEDGE INVERTER OR SOLAREEDGE INVERTER OFF)

Safety Output Voltage per Power Optimiser	1 ± 0.1	Vdc
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#### STANDARD COMPLIANCE

EMC	FCC Part15 Class B, IEC61000-6-2, IEC61000-6-3	
Safety	IEC62109-1 (class II safety), UL1741	
RoHS	Yes	
Fire Safety	VDE-AR-E 2100-712:2013-05	

#### INSTALLATION SPECIFICATIONS

Output Connector	MC4	
Output Wire Length	1.2	m
Operating Temperature Range	-40 - +85 / -40 - +185	°C / °F
Protection Rating	IP68 / NEMA6P	
Relative Humidity	0 - 100	%

PV System Design Using A SolarEdge Inverter		Single Phase HD-Wave	Single Phase	Three Phase Residential <sup>(5)</sup>	Three Phase Commercial	
Minimum String Length (Power Optimisers)	P370	8		8 per array	16	
Maximum String Length (Power Optimisers)		25		25 per array	50	
Maximum Power per String		5700 (6000 with SE8000H, SE10000H)	5250	5700	11250 <sup>(6)</sup>	W
Parallel Strings of Different Lengths or Orientations		Yes				
Notes				Connect 2 arrays		

<sup>(5)</sup> Optimisers must be connected in two separate arrays. For complete design guidelines for the three phase residential inverters refer to: [https://www.solaredge.com/sites/default/files/three\\_phase\\_inverter\\_residential\\_design\\_installation\\_addendum\\_aus.pdf](https://www.solaredge.com/sites/default/files/three_phase_inverter_residential_design_installation_addendum_aus.pdf)

<sup>(6)</sup> It is allowed to install up to 13,500W per string when the maximum power difference between each string is 2,000W